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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,982	11/14/2003	Harold W. Spielman	71060-0020	7495

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EXAMINER

WILLIAMS, THOMAS J

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,982

Applicant(s)

SPIELMAN, HAROLD W.

Examiner

Thomas J. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,9-11,14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 2-8,12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Acknowledgment is made in the receipt of the amendment filed January 5, 2005 and the change of address filed January 7, 2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by US 2,971,612 to Graber.

Graber discloses in a trailer (see figure 11 and column 1 lines 29-32) having an un-powered axle assembly, the axle has brakes that require cooling, a hydraulic pump 58 supplies cooling oil to the brakes (via inlet 39), cam element 62 drives the pump using rotation of the un-powered axle, a heat exchanger assembly 80 is adapted to receive the heated oil from the brakes for cooling and recirculation back to the brakes.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 9-11, 14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graber in view of Larson et al.

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Re-claims 1, 10 and 17, Graber teaches a trailer having an un-powered axle, the axle includes brake assemblies and wheels, a cooling system is associated with each brake assembly, the cooling system includes a cooler assembly 80; a pump 58; a pump drive linked to a transmission of the un-powered axle, the output of the transmission driving the pump, the transmission is the link between the pump and the axle. However, Graber fails to teach the cooler assembly as being an air-oil cooler assembly, a hydraulic fan assembly adapted to circulate cooling air past the air-oil cooler assembly, wherein a fan is driven by a portion of the oil, and a reservoir for storing the oil.

Larson et al. teaches a tractor/trailer having oil cooled brakes on the trailer. The cooling assembly is provided with an air-oil cooler, wherein air is moved past the cooler using an hydraulic fan operated by a portion of the oil, in addition the system is provided with a reservoir for storing the oil. It would have been obvious to one of ordinary skill in the art to have provided the trailer brake cooling system of Graber with the air-oil cooling assembly taught by Larson et al., this would have simplified the cooling assembly by making the cooling assembly self contained. The assembly of Graber requires additional fluid coolant lines (see figure 11) connected to a secondary system (such as a radiator on a tractor). By substituting the assembly of Graber with the assembly taught by Larson et al. one would have eliminated the need for connecting the cooling assembly to a secondary cooling system.

Re-claim 9, Graber teaches an output of the pumps (just past the HEX, this is consistent with the instant invention) is split to a pair of cooling inlets on the un-powered axle.

Re-claim 11, the pump 58 is driven by the transmission link (interpreted as 62).

Re-claim 14, the spring is broadly interpreted as a mechanical clutch, since the spring is a device that engages the pump piston with the cam or transmission element of the axle.

Re-claim 16, the trailer is capable of being any type of trailer known in the art.

Re-claim 18, the un-powered axle is mounted at a rear, see figure 11.

Allowable Subject Matter

6. Claims 2-8, 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Werner, Helvern et al., Kelley et al., Westfall, Schmitt, and Johnson et al. each teach a brake cooling system, wherein a pump coupled with an axle moves the cooling liquid through the brake assembly.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346 (after April 2005 the new telephone number will be 571-272-7128). The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci, can be reached at (703) 308-3668 (after April 11, 2005 the new telephone number will be 571-272-7099). The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

TJW

March 4, 2005

THOMAS WILLIAMS
PATENT EXAMINER

Thomas Williams

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3-4-05